

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-12. (Canceled)

13. (Currently Amended) A method of providing an IP address for a host in a computer network, the method comprising the steps of:

receiving, from a client in a computer network, at an appliance a request for an IP address associated with a domain name associated with a zone;

retrieving the requested IP address from an object oriented database associated with the appliance; and

transmitting the retrieved IP address to the client;

wherein:

the object oriented database comprises a zone object tree that includes a plurality of zone objects, including a first zone object associated with the zone, wherein the first zone object is linked to a second zone object associated with a sub-zone of the zone;

the zone and sub-zone are associated with a logically hierarchical set of zone information;

the object oriented database comprises a network object tree that includes a logically hierarchical set of network objects each associated with a numerical sub-network designation, wherein the logically hierarchical set of network objects corresponds to the IP address associated with a host object; and

the zone object tree and the network object tree are linked via a the host object that is associated with the domain name and the IP address, wherein the host object is stored with a first attribute corresponding to a first sub-zone of the domain name and a second attribute corresponding to a first numerical sub-network designation of the IP address.

14. (Previously Presented) The method of claim 13, further comprising the step of establishing communicative coupling between a client web browser and the appliance.
15. (Original) The method of claim 13, wherein the computer network comprises the Internet.
16. (Original) The method of claim 13, wherein the computer network comprises an IP based computer network.
17. (Original) The method of claim 13, wherein the computer network comprises an intranet.
18. (Previously Presented) The method of claim 13, wherein the appliance receives the request.
19. (Previously Presented) The method of claim 13, further including linking a host object with a network object and a zone object.
20. (Previously Presented) The method of claim 19, wherein the zone object is linked to another zone object.
21. (Previously Presented) The method of claim 19, wherein the network object is linked to another network object.
22. (Previously Presented) The method of claim 13, further including:
 - unlinking an old network object from a host object;
 - deleting the old network object; and
 - linking the host object to a new network object.
23. (Previously Presented) The method of claim 22, further including automatically updating the host object to reflect an association with the new network object.
- 24-35. (Canceled)

36. (Currently Amended) A computer program product for providing an IP address for a host in a computer network, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

receiving, from a client in a computer network, at an appliance a request for an IP address associated with a domain name associated with a zone;

retrieving the requested IP address from an object oriented database associated with the appliance; and

transmitting the retrieved IP address to the client;

wherein:

the object oriented database comprises a zone object tree that includes a plurality of zone objects, including a first zone object associated with the zone, wherein the first zone object is linked to a second zone object associated with a sub-zone of the zone;

the zone and sub-zone are associated with a logically hierarchical set of zone information;

a logically hierarchical set of network objects each associated with a numerical sub-network designation, wherein the logically hierarchical set of network objects corresponds to the IP address associated with a host object; and

the zone object tree and the network object tree are linked via a the host object that is associated with the domain name and the IP address, wherein the host object is stored with a first attribute corresponding to a first sub-zone of the domain name and a second attribute corresponding to a first numerical sub-network designation of the IP address.

37. (Previously Presented) A computer program product as recited in claim 36, the computer program product further comprising computer instructions for establishing communicative coupling between a client web browser and the appliance.

38. (Previously Presented) A computer program product as recited in claim 36, wherein the computer network comprises the Internet.

39. (Previously Presented) A computer program product as recited in claim 36, wherein the computer network comprises an IP based computer network.

40. (Previously Presented) A computer program product as recited in claim 36, wherein the computer network comprises an intranet.

41. (Previously Presented) A computer program product as recited in claim 36, wherein the appliance receives the request.

42. (Previously Presented) A computer program product as recited in claim 36, the computer program product further comprising computer instructions for linking a host object with a network object and a zone object.

43. (Previously Presented) A computer program product as recited in claim 42, wherein the zone object is linked to another zone object.

44. (Previously Presented) A computer program product as recited in claim 42, wherein the network object is linked to another network object.

45. (Previously Presented) A computer program product as recited in claim 36, the computer program product further comprising computer instructions for:

 unlinking an old network object from a host object;

 deleting the old network object; and

 linking the host object to a new network object.

46. (Previously Presented) A computer program product as recited in claim 45, the computer program product further comprising computer instructions for automatically updating the host object to reflect an association with the new network object.

47-58. (Canceled)

59. (Currently Amended) A system for providing an IP address for a host in a computer network, including:

a processor configured to:

receive, from a client in a computer network, at an appliance a request for an IP address associated with a domain name associated with a zone;

retrieve the requested IP address from an object oriented database associated with the appliance;

transmit the retrieved IP address to the client;

wherein:

the object oriented database comprises a zone object tree that includes a plurality of zone objects, including a first zone object associated with the zone, wherein the first zone object is linked to a second zone object associated with a sub-zone of the zone;

the zone and sub-zone are associated with a logically hierarchical set of zone information;

a logically hierarchical set of network objects each associated with a numerical network sub-designation, wherein the logically hierarchical set of network objects corresponds to the IP address associated with a host object; and

the zone object tree and the network object tree are linked via a the host object that is associated with the domain name and the IP address, wherein the host object is stored with a first attribute corresponding to a first sub-zone of the domain name and a second attribute corresponding to a first numerical sub-network designation of the IP address; and

a memory coupled with the processor, wherein the memory provides the processor with instructions.

60. (Previously Presented) The system of claim 59, wherein the processor is further configured to establish communicative coupling between a client web browser and the appliance.
61. (Previously Presented) The system of claim 59, wherein the computer network comprises the Internet.
62. (Previously Presented) The system of claim 59, wherein the computer network comprises an IP based computer network.
63. (Previously Presented) The system of claim 59, wherein the computer network comprises an intranet.
64. (Previously Presented) The system of claim 59, wherein the appliance receives the request.
65. (Previously Presented) The system of claim 59, wherein the processor is further configured to link a host object with a network object and a zone object.
66. (Previously Presented) The system of claim 65, wherein the zone object is linked to another zone object.
67. (Previously Presented) The system of claim 65, wherein the network object is linked to another network object.
68. (Previously Presented) The system of claim 59, wherein the processor is further configured to:
- unlink an old network object from a host object;
 - delete the old network object; and
 - link the host object to a new network object.

69. (Previously Presented) The system of claim 68, wherein the processor is further configured to automatically update the host object to reflect an association with the new network object.

70. (Previously Presented) The method of claim 13, wherein the operating system is derived from a full operating system that includes the at least one software component.

71. (Previously Presented) The method of claim 13, wherein the at least one software component includes one of the following: a driver or a utility software.

72. (Previously Presented) The method of claim 13, wherein the appliance excludes a hardware component that typically is included in a host computing system but that is not required to provide the network name-related functionality.

73. (Previously Presented) The method of claim 13, wherein the appliance excludes a communication port that typically is included in a host computing system but that is not required to provide network name-related functionality.

74. (Previously Presented) The method of claim 13, wherein the network name-related functionality comprises the Domain Name Service (DNS) and the IP address comprises a requested IP address associated with a host identified in a DNS request received at the appliance.

75. (Previously Presented) The method of claim 13, further including providing an interface for configuring the appliance.

76. (Previously Presented) The method of claim 13, further including providing a web interface for configuring the appliance from a client web browser.

77. (Previously Presented) The method of claim 13, wherein the appliance includes a DNS server, a configuration server, a web server, a database, and/or a GUI.

78. (Previously Presented) The method of claim 13, wherein the database comprises an object oriented database.

79. (Previously Presented) The computer program product of claim 36, wherein the operating system is derived from a full operating system that includes the at least one software component.

80. (Previously Presented) The computer program product of claim 36, wherein the at least one software component includes one of the following: a driver or a utility software.

81. (Previously Presented) The computer program product of claim 36, wherein the appliance excludes a hardware component that typically is included in a host computing system but that is not required to provide the network name-related functionality.

82. (Previously Presented) The computer program product of claim 36, wherein the appliance excludes a communication port that typically is included in a host computing system but that is not required to provide network name-related functionality.

83. (Previously Presented) The computer program product of claim 36, wherein the network name-related functionality comprises the Domain Name Service (DNS) and the IP address comprises a requested IP address associated with a host identified in a DNS request received at the appliance.

84. (Previously Presented) The computer program product of claim 36, the computer program product further comprising computer instructions for providing an interface for configuring the appliance.

85. (Previously Presented) The computer program product of claim 36, the computer program product further comprising computer instructions for providing a web interface for configuring the appliance from a client web browser.

86. (Previously Presented) The computer program product of claim 36, wherein the appliance includes a DNS server, a configuration server, a web server, a database, and/or a GUI.

87. (Previously Presented) The computer program product of claim 36, wherein the database comprises an object oriented database.

88. (Previously Presented) The system of claim 59, wherein the operating system is derived from a full operating system that includes the at least one software component.

89. (Previously Presented) The system of claim 59, wherein the at least one software component includes one of the following: a driver or a utility software.

90. (Previously Presented) The system of claim 59, wherein the appliance excludes a hardware component that typically is included in a host computing system but that is not required to provide the network name-related functionality.

91. (Previously Presented) The system of claim 59, wherein the appliance excludes a communication port that typically is included in a host computing system but that is not required to provide network name-related functionality.

92. (Previously Presented) The system of claim 59, wherein the network name-related functionality comprises the Domain Name Service (DNS) and the IP address comprises a requested IP address associated with a host identified in a DNS request received at the appliance.

93. (Previously Presented) The system of claim 59, wherein the processor is further configured to provide an interface for configuring the appliance.

94. (Previously Presented) The system of claim 59, wherein the processor is further configured to provide a web interface for configuring the appliance from a client web browser.

95. (Previously Presented) The system of claim 59, wherein the appliance includes a DNS server, a configuration server, a web server, a database, and/or a GUI.
96. (Previously Presented) The system of claim 59, wherein the database comprises an object oriented database.
97. (Cancelled)
98. (Cancelled)
99. (Cancelled)
100. (Cancelled)
101. (Cancelled)
102. (Cancelled)
103. (Previously presented) The method of claim 13, wherein retrieving includes identifying a top level zone in the domain name and accessing a zone object associated with the top level zone.
104. (Previously presented) The method of claim 103, wherein retrieving includes identifying a sub-zone in the domain name and accessing a zone object associated with the sub-zone.
105. (Previously presented) The method of claim 104, wherein retrieving includes realizing that a last term in a domain name has been reached and accessing a host object associated with the domain name.

106. (Previously presented) The computer program product of claim 36, wherein retrieving includes identifying a top level zone in the domain name and accessing a zone object associated with the top level zone.

107. (Previously presented) The computer program product of claim 106, wherein retrieving includes identifying a sub-zone in the domain name and accessing a zone object associated with the sub-zone.

108. (Previously presented) The computer program product of claim 107, wherein retrieving includes realizing that a last term in a domain name has been reached and accessing a host object associated with the domain name.

109. (Previously presented) The system of claim 59, wherein retrieving includes identifying a top level zone in the domain name and accessing a zone object associated with the top level zone.

110. (Previously presented) The system of claim 109, wherein retrieving includes identifying a sub-zone in the domain name and accessing a zone object associated with the sub-zone.

111. (Previously presented) The system of claim 110, wherein retrieving includes realizing that a last term in a domain name has been reached and accessing a host object associated with the domain name.